

INTERNATIONAL SEARCH REPORT

International Application No.
PCT/JP 01/14414

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F04B39/12 F04C23/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 F04B F04C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 782 622 A (ONODA IZUMI ET AL) 21 July 1998 (1998-07-21) the whole document column 6, line 33 - line 38	1-22
X	PATENT ABSTRACTS OF JAPAN vol. 0060, no. 50 (M-120), 3 April 1982 (1982-04-03) -& JP 56 165788 A (HITACHI LTD), 19 December 1981 (1981-12-19) abstract; figures 5,6	1-22
X	PATENT ABSTRACTS OF JAPAN vol. 0102, no. 65 (M-515), 10 September 1986 (1986-09-10) -& JP 61 087984 A (HITACHI LTD), 6 May 1986 (1986-05-06) abstract; figures 1-6	1-22
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

7 January 2005

Date of mailing of the international search report

18/01/2005

Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax (+31-70) 340-3016

Authorized officer

Ingelbrecht, P

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International Application No.
PCT/JP87/014414

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4 545 742 A (SCHAEFER DONALD D) 8 October 1985 (1985-10-08) the whole document -----	1-22
A	PATENT ABSTRACTS OF JAPAN vol. 0121, no. 20 (M-685), 14 April 1988 (1988-04-14) & JP 62 247188 A (HITACHI LTD), 28 October 1987 (1987-10-28) abstract -----	1-22

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Information on patent family members

International Application No.

PCT/JP2000/014414

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5782622	A	21-07-1998	JP 3390593 B2 JP 9158883 A CN 1156217 A ,B KR 208881 B1	24-03-2003 17-06-1997 06-08-1997 15-07-1999
JP 56165788	A	19-12-1981	JP 63052237 B	18-10-1988
JP 61087984	A	06-05-1986	NONE	
US 4545742	A	08-10-1985	US 4477233 A	16-10-1984
JP 62247188	A	28-10-1987	NONE	

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